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10 001,052	11-15-2001	David Alan Mead	MICRO-06635	9442	
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MEDLEN & CARROLL, LLP 101 HOWARD STREET SUITE 350 SAN FRANCISCO, CA 94165			EXAMINER		
			SULLIVAN, DANIEL M		
SAIN LIXAING	13CO, CA 94103	-	ART UNIT	PAPER NUMBER	
			1636	G	
			DATI: MAILED: 10-19-2002	/	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No. Appl		Applicant(s)	olicant(s)				
!		10/001,052		MEAD ET AL.					
į	Office Action Summary	Examiner		Art Unit					
i		Daniel M Sulliva	n	1636					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1 136(a). In no event, however, may a reply be timely filled after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply is pecified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutor, period will apply and will expire SIX (6) MONTHS from the making date of this communication.  - Failure to reply within the set or extended period for reply will, by statute cause the application to become ABANDONED (35 U S C § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filled, may reduce any earned patent term adjustment. See 37 CFR 1 704(b).									
Status									
1)	Responsive to communication(s) filed on								
2a)	This action is <b>FINAL</b> . 2b) This action is non-final.								
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.									
Dispositi	on of Claims	_ · parto quayre	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
4)⊠ Claim(s) <u>23-27 and 29-42</u> is/are pending in the application.									
4a) Of the above claim(s) is/are withdrawn from consideration.									
5) Claim(s) is/are allowed.									
6)⊠ Claim(s) <u>23-27,29,31-37 and 39-42</u> is/are rejected.									
7)[	7)⊠ Claim(s) <u>30 and 38</u> is/are objected to.								
8) Claim(s) are subject to restriction and/or election requirement.									
Application Papers									
9) The specification is objected to by the Examiner.									
10) $\square$ The drawing(s) filed on 15 November 2001 is/are a) $\square$ accepted or b) $\square$ objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.									
if approved, corrected drawings are required in reply to this Office action.									
12) The oath or declaration is objected to by the Examiner.									
Priority under 35 U.S.C. §§ 119 and 120									
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a) All b) Some * c) None of:									
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
14)⊠ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).									
a) [] The translation of the foreign language provisional application has been received.  15)[] Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.									
Attachment(s)									
2) Notice	e of References Cited (PTC-892) e of Draftsperson's Patent Drawing Review (PTC-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	4) 5) 6)		/ (PTO-413) Paper No Patent Application (PT					

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## **DETAILED ACTION**

This is a First Office Action on the Merits of the Application filed November 15, 2001, which claims priority to U.S. Provisional Application 60:249,594, filed November 17, 2000. The amendments filed April 26, 2002 (paper #4) and August 12, 2002 (paper #8) have been entered. Claims 1-22 and 28 were cancelled and new claims 29-42 were added in paper #8. Claims 23-27 and 29-42 are currently pending in the Application.

## Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- 1. Claims 1-9 and 28, drawn to A composition and system for cloning a nucleic acid of X+1 vector components configured to accept X+1 insert sequences to form a circular vector wherein said insert sequences are non-contiguous, classified in class 435, subclass 320.1.
- II. Claims 12-22, drawn to a composition comprising a circular vector, which comprises a toxic gene sequence, classified in class 435, subclass 320.1.
- III. Claims 23-27, drawn to a composition comprising a vector component configured to form a circular recombinant vector when combined with an insert sequence, classified in class 435, subclass 320.1.

The inventions are distinct, each from the other because of the following reasons:

Inventions I, II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different

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inventions are drawn to distinct vector compositions, one being configured so as to accept multiple insert sequences simultaneously so that said insert sequences are noncontiguous within the product construct, one configured such that a single insert sequence can be substituted for a toxic gene sequence in the vector, and one configured to be ready to accept a single insert sequence. The inventions are not disclosed as capable of use together and clearly have different modes of operation, as the composition of claim Group I is designed to accept multiple inserts, the composition of Group III is designed to accept a single insert, and the composition of Group II is designed to allow for positive selection of a recombinant plasmid.

During a telephone conversation with Jason R. Bond on July 25, 2002 a provisional election was made with traverse to prosecute the invention of Group III, claims 23-27.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-22 and 28 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on-sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 23-27, 32-35, 37 and 39-42 are rejected under 35 U.S.C.§102(b) as being anticipated by either one of Brosius (1984) *Gene* 27151-160 or Brückner (1992) *Gene* 122:187-192.

Claim 23 is directed to a composition comprising a vector component comprising: i) first and second free ends; ii) a selectable marker region, iii) a first transcriptional terminator between said first free end and said selectable marker region, and iv) a second transcriptional terminator between said second free end and said selectable marker region, and wherein said vector component is configured to form a circular recombinant vector when combined with an insert sequence. Please note that, because the disclosure does not provide a means to distinguish a first free end from a second free end (defined in the specification in the paragraph bridging pages 45 and 46), the claims have been interpreted broadly to encompass either of the free ends being designated first or second. For example, art that teaches the configuration "free end-terminator-marker-free end" will read on a claim limited to "first free end-terminator-marker-second free end" or "first free end-marker-terminator-second free end".

Brückner teaches a plasmid vector having a selectable marker region and first and second transcriptional terminators. The plasmid vector of Brückner further comprises a polylinker region positioned such that cleavage of any one of the unique restriction sites within the polylinker would yield a vector component comprising first and second free ends, a first transcriptional terminator between said first free end and said selectable marker and a second transcriptional terminator between said second free end and said selectable marker region (see especially Figure 1 and the caption thereto). One of ordinary skill in the art would know to cut the circular plasmid

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to produce the vector component because Brückner teaches that the vectors are to be used for cloning in *B. subtilis* and *E. coli* (see especially the final paragraph on page 191). Therefore, the teachings of Brückner anticipate the claim.

Brosius also teaches a plasmid vector having a selectable marker region and first and second transcriptional terminators (see especially pKK175-6 or pKK231-1 described in Figures 6 and 7 respectively). The plasmid vector of Brosius further comprises a polylinker region positioned such that cleavage of any one of the unique restriction sites within the polylinker would yield a vector component comprising first and second free ends, a first transcriptional terminator between said first free end and said selectable marker and a second transcriptional terminator between said second free end and said selectable marker region (see especially Figures 6 and 7 and the captions thereto). Brosius goes on to teach production of a vector component with first and second free ends by digestion with EcoRI restriction endonuclease (see especially the final paragraph on page 156). Thus, the teachings of Brosius contain all of the limitations of the claim and therefore the claim is anticipated by Brosius.

Claim 24 limits the composition of claim 23 to a composition wherein said first transcriptional terminator is configured to terminate RNA transcripts entering said selectable marker region from said first free end.

The vector of Brückner comprises a terminator configured to terminate RNA transcripts entering the *bla* marker gene from the polylinker region; the vector of Brosius comprises a terminator configured to terminate RNA transcripts entering the Amp<sup>r</sup> gene from the first free end as evidenced by the teaching of Brosius that, "both  $T_1$  and  $T_2$  terminate, though less

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efficiently, transcription in the opposite orientation" (see especially the final sentence of the first paragraph on page 158 and citations therein).

Claim 25 limits the composition of Claim 23 to a composition wherein said second transcriptional terminator is configured to terminate RNA transcripts entering said selectable marker region from said second free end. As described herein above, because the first and second free ends can be arbitrarily designated, claims 24 and 25 encompass overlapping embodiments. Therefore, the prior art that reads on claim 24 also reads on claim 25 when the assignment of first and second free ends is reversed.

Claim 26 limits the composition of Claim 23 to a composition wherein said selectable marker region comprises a transcriptional terminator configured to terminate RNA transcripts encoding at least one selectable marker sequence in said selectable marker region.

The vector of Brückner comprises a transcriptional terminator (i.e.  $t_0$ ) configured to terminate RNA transcripts encoding at least one selectable marker sequence, as does the vector of Brosius (i.e.  $T_2$  and  $T_1$  following the Amp<sup>r</sup> gene).

Claim 27 is directed to the composition of Claim 23, wherein said vector component comprises a first non-promoter sequence between said first free end and said selectable marker region, and a second non-promoter sequence between said second free end and said selectable marker region, wherein each of said first and second non-promoter sequences are unable to serve as an operable promoter in a bacterial host cell.

The vector of Brückner comprises non-promoter sequence flanking the polylinker, as does the vector of Brosius. Therefore the cited art anticipates the claim.

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Claim 32 is drawn to a composition comprising a circular vector which comprises a nucleic acid sequence comprising: a) a first end and a second end, wherein said first end is attached to said second end; b) a selectable marker region; c) a first transcriptional terminator between said first end and said selectable marker region; and d) a second transcriptional terminator between said second end and said selectable marker region; claim 33 is directed to the composition of Claim 32, wherein said selectable marker region comprises a transcriptional terminator configured to terminate RNA transcripts encoding at least one selectable marker sequence in said selectable marker region; and claim 34 is directed to the composition of Claim 32, wherein said nucleic acid sequence comprises a first non-promoter sequence between said first end and said selectable marker region, and a second non-promoter sequence between said second end and said selectable marker region, wherein each of said first and second non-promoter sequences are unable to serve as an operable promoter in a bacterial host cell.

The teachings of Brosius and Brückner as applied to claims 23, 26 and 27 above read on claims 32-34, respectively, as claims 32-34 simply recite the same limitations as claims 23, 26 and 27 for a circularized vector. Therefore the limitations of the claims are met by the prior art.

Claim 35 is directed to a composition comprising a circular vector, wherein said circular vector comprises: a) a nucleic acid sequence comprising; i) first and second ends, ii) a selectable marker region, iii) a first transcriptional terminator between said first end and said selectable marker region, and iv) a second transcriptional terminator between said second end and said selectable marker region; and b) an insert sequence, wherein said insert sequence is attached to said first and second ends and claim 37 is directed to the composition of Claim 35, wherein said

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insert sequence contains transcriptional promoters or regions that behave as promoters in bacteria.

As described above, Brosius and Brückner teach a vector comprising all of the limitations of part (a). Brückner further teaches insertion of a cat or lacZ gene between the first and second ends within the polylinker (see especially Figure 1, pRB394, pRB395, pRB381 and pRB382) and the isolation of regions that behave as promoters in bacteria by shotgun cloning such that the insert sequence of pRB394 further comprises said regions that behave as promoters in bacteria. Brosius teaches that pKK175-6 and pKK231-1 should be used as promoter-probes wherein sequences containing transcriptional promoters that behave as promoters in bacteria should be inserted into the polylinker, which comprises the first and second ends according to claim 35 (see especially the Summary paragraph on page 151). The limitations of the instant claims are therefore anticipated by Brosius and Brückner.

Claim 39 is drawn to the composition of Claim 35, wherein said first transcriptional terminator is configured to terminate RNA transcripts entering said selectable marker region from said first end; claim 40 is drawn to the composition of Claim 35, wherein said second transcriptional terminator is configured to terminate RNA transcripts entering said selectable marker region from said second end; and claim 41 is directed to the composition of Claim 35, wherein said selectable marker region comprises a transcriptional terminator configured to terminate RNA transcripts encoding at least one selectable marker sequence in said selectable marker region.

As described above with regard to claims 24 and 25, Brosius and Brückner each teach vectors wherein the first or second transcriptional terminators are configured to terminate RNA

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transcripts entering the selectable marker region from the first or second ends respectively. Configuration of these vectors such that they further comprise an insert sequence according to the limitations of claim 35 are also taught in these citations (supra). These constructs also comprise a transcriptional terminator configured to terminate RNA transcripts encoding at least one selectable marker sequence (i.e.  $T_0$  of Brückner and  $T_1$  and  $T_2$  of Brosius). Therefore the limitations of the claim are met by Brosius and Brückner.

Claim 42 is drawn to the composition of Claim 35, wherein said nucleic acid sequence comprises a first non-promoter sequence between said first end and said selectable marker region, and a second non-promoter sequence between said second end and said selectable marker region, wherein each of said first and second non-promoter sequences are unable to serve as an operable promoter in a bacterial host cell. The vectors applied to claim 35 above each comprise nucleic acid sequence between the first end and the selectable marker and between the second end and the selectable marker that is unable to serve as an operable promoter in a bacterial host cell. Therefore the teachings of Brosius and Brückner meet the limitations of claim 42.

Claims 23-27 and 32-35 and 39-42 are rejected under 35 U.S.C.§102(b) as being anticipated by Podbielski *et al.* (1996) *Gene* 177:137-147.

The limitations of the claims are recited above. Podbielski *et al.* teaches a plasmid vector having a selectable marker region (i.e. *aad9* spectinomycin resistance gene) and first and second transcription terminators (see especially pFW5 in Figure 2). The plasmid of Podbielski *et al.* further comprises multiple cloning site (i.e. MCS II) positioned such that cleavage of any one of the unique restriction sites within the multiple cloning site would yield a vector component

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comprising first and second free ends, a first transcriptional terminator between said first free end and said selectable marker and a second transcriptional terminator between said second free end and said selectable marker region. The circular vector taught by Podbielski *et al.* is the same as the composition claimed in claim 32, and the vector linearized by digestion in MCS II is the same as the composition of claim 23. Podbielski *et al.* teaches that the purpose of the vectors is to clone genes from *Streptocuccus* by insertion into the multiple cloning site (see especially the paragraph bridging columns 1 and 2 on page 138). Therefore one of ordinary skill would know to cut the circular plasmid to produce the vector component according to the teachings of the instant Application.

The transcriptional terminators of Podbielski *et al.* are configured so as to terminate transcripts entering the selectable marker region from the first or second free ends (i.e. tt3 and tt4; see also the first full paragraph in the second column of page 140) and to terminate transcripts encoding the selectable marker sequence (i.e. tt2). Therefore the vector taught by Podbielski *et al.* is the same as the composition of claims 24-26 and 33. The vector taught by Podbielski *et al.* also comprises non-promoter sequence between the selectable marker region and each of the first and second free ends, which would result from cutting the vector in MCS II; therefore the vector anticipates the composition of claims 27 and 34.

Podbielski *et al.* teaches that DNA fragments can be cloned into pFW5 at MCS-II (see especially the paragraph bridging pages 139 and 140), which would produce a recombinant molecule according to the composition of claim 35. As described above, said recombinant molecule would also comprise a first transcriptional terminator configured to terminate RNA transcripts entering the selectable marker region from the first end, a second transcriptional

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terminator configured to terminate RNA transcripts entering said selectable marker region from said second end, a transcriptional terminator configured to terminate RNA transcripts encoding at least one selectable marker region and non-promoter sequences between the first and second ends and a selectable marker region. Therefore, the teachings of Podbielski *et al.* anticipate each of claims 39-42. The teachings of Podbielski *et al.* are the same as the teachings of the instant Application; therefore the limitations of the claims are met by Podbielski *et al.* 

Claims 23-25, 27, 32, 34, 35, 39, 40 and 42 are rejected under 35 U.S.C. § 102(b) as being anticipated by Gil and Bouché (1991) *Gene* 105:17-22.

The limitations of the claims are recited above. Gil and Bouché teaches a plasmid vector having a selectable marker region (i.e. Ap<sup>7</sup>, ampicillin resistance gene) and first and second transcription terminators (see especially pAM34 in Figure 2). The plasmid of Gil and Bouché further comprises multiple cloning site (i.e. either of the regions shown to comprise multiple unique restriction sites) positioned such that cleavage of any one of the unique restriction sites within the multiple cloning site would yield a vector component comprising first and second free ends, a first transcriptional terminator between said first free end and said selectable marker and a second transcriptional terminator between said second free end and said selectable marker region. The circular vector taught by Gil and Bouché is the same as the composition claimed in claim 32, and the vector linearized by digestion in either of the multiple cloning sites is the same as the composition of claim 23. Gil and Bouché teaches that inserts can be cloned into the vectors at either or both of the multiple cloning sites (see especially page 18, the final sentence of the second full paragraph in column two). Therefore one of ordinary skill would know to cut the

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circular plasmid to produce the vector component according to the teachings of the instant Application.

The transcriptional terminators of Gil and Bouché are configured so as to terminate transcripts entering the selectable marker region from said first or second free ends; therefore the vector taught by Gil and Bouché is the same as the composition of claims 24 and 25. The vector taught by Gil and Bouché also comprises non-promoter sequence between the selectable marker region and each of the first and second free ends, which would result from cutting the vector in either multiple cloning sequence; therefore the vector anticipates the composition of claims 27 and 34.

Gil and Bouché teaches that DNA fragments can be cloned into pFW5 at either or both multiple cloning sites which would produce a recombinant molecule according to the composition of claim 35. As described above, said recombinant molecule would also comprise a first transcriptional terminator configured to terminate RNA transcripts entering the selectable marker region from the first end, a second transcriptional terminator configured to terminate RNA transcripts entering said selectable marker region from said second end and non-promoter sequences between the first and second ends and a selectable marker region. Therefore, the teachings of Gil and Bouché anticipate each of claims 39, 40 and 42. The teachings of Gil and Bouché are the same as the teachings of the instant Application; therefore the limitations of the claims are met by Gil and Bouché.

Claim Rejections - 35 USC § 103

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobyjousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 23, 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Gil and Bouché (*supra*), Podbielski *et al.* (*supra*), Brosius (*supra*) or Brückner (*supra*) in view of *Current Protocols in Molecular Biology Online* (1999) Chapter 3, Example 3.16.1, John Wiley & Sons.

The limitations of claim 23 are recited above, as are the teachings of Gil and Bouché. Podbielski *et al.*. Brosius and Brückner. Claim 29 is directed to the composition of Claim 23, wherein said first and second free ends are dephosphorylated and claim 31 is directed to the

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composition of claim 23, wherein said first and second free ends are sticky ends. Gil and Bouché, Podbielski et al., Brosius or Brückner teach all of the limitations of claim 23 and teach that the compositions they described should be used for cloning insert DNA into restriction enzyme digests of said compositions. Gil and Bouché, Podbielski et al., Brosius or Brückner do not provide an explicit teaching of compositions comprising dephosphorylated or sticky free ends. It is well know in the art, however, that sticky and/or dephosphorylated free ends are advantageous in cloning insert DNAs into restriction enzyme digested vectors. Current Protocols in Molecular Biology Online provides one example of such a teaching. In the first paragraph of page 1 of 5, Current Protocols in Molecular Biology Online teaches that when cloning into a vector with compatible free ends "[t]he major source of background is...self ligated vector DNA. In most cases, self-ligation should be reduced by treating the ... vector DNA with calf intestinal alkaline phosphatase". In the third paragraph on page 2 of 5, Current Protocols in Molecular Biology Online further teaches that, "[a]Ithough T4 DNA ligase can join fragments with blunt ends, ligation efficiency is greatly reduced as compared to fragments with cohesive ends". These teachings provide both the instruction and motivation to create the compositions of claims 29 and 31 to be used in the cloning method of taught by each of Gil and Bouché. Podbielski et al., Brosius or Brückner. The claimed compositions would therefore have been obvious to one of ordinary skill in the art at the time the invention was made.

Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Gil and Bouché (*supra*), Podbielski *et al.* (*supra*), Brosius (*supra*) or Brückner (*supra*) in view of Bernard *et al.* (1994) *Gene* 148:71-74.

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The limitations of claim 35 are recited above, as are the teachings of Gil and Bouché. Podbielski et al., Brosius and Brückner, Claim 36 is drawn to the composition of claim 35, wherein said insert sequence encodes a peptide that is deleterious to a host cell. The teachings of Gil and Bouché, Podbielski et al., Brosius or Brückner, described herein above, encompass all of the limitations of the composition of claim 35, and further indicate that the compositions they describe should be used as cloning vectors. Bernard et al. teaches a means to improve the efficiency of cloning into vectors by inserting the cytotoxic ccdB gene into the cloning site of a plasmid vector (see especially Table 1 and the caption thereto). The use of insert sequences encoding peptides deleterious to a host cell as a means to improve cloning efficiency was therefore well known in the art at the time the instant Application was filed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Gil and Bouché. Podbielski et al., Brosius or Brückner with the teachings of Bernard et al. to produce a composition with enhanced cloning efficiency. Motivation to combine these teachings comes from the stated purpose of the vectors of Gil and Bouché. Podbielski et al., Brosius or Brückner, i.e. cloning DNA fragments, and from Bernard et al. who teach. "[t]he positive selection of recombinant clones is highly efficient and bench manipulations are simplified to the utmost" when using positive selection vectors (summary paragraph on page 71).

## Allowable Subject Matter

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Claims 30 and 38 objected to as being dependent upon a rejected base claim, but would

be allowable if rewritten in independent form including all of the limitations of the base claim

and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Daniel M Sullivan whose telephone number is 703-305-4448.

The examiner can normally be reached on Monday through Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Irem Yucel can be reached on 703-305-1998. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-746-9105 for regular

communications and 703-746-9105 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-308-0196.

dms

October 16, 2002